

REMARKS

File History

In the Office action of 5/11/2004, the following rejections, objections were made:

> Claims 1-3 were rejected under 35 USC §102 as being fully anticipated by Berhringer [sic --actually Feldenz] (DE 196-15-114).

> Claims 4-5 were rejected under 35 USC §103(a) as being obvious over Berhringer in further view of Kockelman (US Pat. 6,342,017).

Summary of Current Response

Claims 1-5 are amended.

Claims 6-34 are newly introduced.

Arguments are presented concerning the applied art and its proposed modification.

Applied Art

The Examiner is correct in finding that Berhringer (aka Feldenz) is directed to an amusement device. However, Berhringer (aka Feldenz) does not teach or suggest an amusement device that tilts the riders to an angle of excitement (e.g., 30-90° off the horizontal) prior to releasing them onto a continuation track.

Quite to the contrary, the one drawing of Berhringer (aka Feldenz) suggests a system for keeping the ride vehicle (a boat) substantially horizontal at all times while the Ferris wheel (10) picks up a conveyor-driven (7,3) boat at lower position 5 and brings the boat (2) clockwise about a roughly 270° counterclockwise rotation to upper position 4. Although a translation of the German has not been obtained, it would seem that the horizontal portion of the rotational vector at upper position 4 causes the boat to slip out off of rollers 15 and onto horizontal connection rollers 8 before dropping down further along angled rollers 9. The angled rollers 9 are not part of movable support section 12 and the movable support section 12 remains substantially horizontal throughout its rotation on Ferris wheel (10).

Arguments

Claim 1 of the present application is being amended herein not for differentiating over the applied Berhringer (aka Feldenz) reference, but rather to clarify that the angle (of extension of the movable track portion) is sufficiently large to provide a sense of excitement to the one or more persons in the vehicle.

Berhringer (aka Feldenz) not only fails to suggest such a concept but teaches away due to the presence of free pivot (axle) 13.

Claim 2 of the present application is being amended herein not for differentiating over the applied Berhringer (aka Feldenz) reference, but rather to simplify its language and thus make it clearer that the angle of extension of the movable track portion is substantially a vertical one at the second, relatively high position. Nowhere does Berhringer (aka Feldenz) teach or suggest such a concept. Berhringer (aka Feldenz) instead clearly teaches away due to the presence of free pivot 13 which assures that the boat will remain substantially horizontal during its entire travel around on the Ferris wheel (10).

Claim 3 of the present application is being amended herein not for differentiating over the applied Berhringer (aka Feldenz) reference, but rather to clarify that the originally recited rail is a guide rail and that the movable track portion of this embodiment extends substantially perpendicularly to the guide rail as the movable track portion moves along the guide rail (e.g., 9,10,11). It is respectfully submitted that the finding of fact made re Berhringer (aka Feldenz) on the aspect of perpendicular orientation is in error. The movable roller section 12 of Berhringer (aka Feldenz) remains substantially horizontal during its entire travel around the Ferris wheel (10). Thus the rejection is based on improper fact finding.

Claim 4 of the present application is being amended herein not for differentiating over the applied Berhringer (aka Feldenz) reference, but rather to clarify that the movable track portion is moved by means of a cable. There is no reasonable justification for combining Kockelman with Berhringer (aka Feldenz). Kockelman is directed to a drop-seat which always remains on a vertical track. There is no moving of a track section from one place to another. Thus Kockelman fails to teach the application of cables to a system where a track section moves from one place to another. Berhringer (aka Feldenz) also fails to teach the application of cables to a system where a track section moves from one place to another. Berhringer (aka Feldenz) teaches to use a Ferris wheel. There is no factual basis in the prior art for arguing that cables would provide a smoother, more efficient transfer of a movable track section because Kockelman has none.

With respect to Claim 5, because Kockelman fails to teach a movable track section, Kockelman cannot logically provide the suggestion of having a safety cable with two ends attached to such a movable track section. No reasoning is provided for how the combination of Kockelman and Berhringer (aka Feldenz) renders Claim 5 obvious.

In view of the above, it is respectfully requested that the outstanding grounds of rejection against Claims 1-5 be withdrawn as being based on incorrect fact finding.

Request for Examination and Allowance

Examination is respectfully requested for the amended application. In view of the above, it is respectfully submitted that all of Claims 1-5 and all of new Claims 6-34 should be in condition for allowance in view of the art of record. A telephone call to the below attorney is requested if it will help expedite processing of the application.

A two month extension of time is requested.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 50-2257 for any matter in connection with this response, including any fee for extension of time and/or fee for additional claims, which may be required.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on October 12, 2004.

 10-12-2004

Attorney for Applicant(s)

Date of Signature

Respectfully submitted,



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APPENDIX A (October 2004)

CLAIMS LISTING

Claim 1: (*Currently amended*) An amusement device comprising

a vehicle adapted to carry one or more persons and to ~~that can~~ be moved along over an elongated track as well as along a movable track portion that can be moved jointly with said vehicle from a first, relatively low position to a second, relatively high position, or vice versa, which movable track portion can detachably connect to said elongated track at least when at said second, relatively high position,

characterized in that the movable track portion extends substantially horizontally in said first position, whereas the movable track portion extends at an angle to the horizontal in said second position, said angle being sufficiently large to provide a sense of excitement to the one or more persons in the vehicle.

Claim 2: (*Currently amended*) An amusement device according to Claim 1,

characterized in that the movable track portion ~~extends substantially horizontally in said first position, whereas the track portion~~ extends substantially vertically in said second position.

Claim 3: (*Currently amended*) An amusement device according to Claim 1,

characterized in that the movable track portion is movable along a guide rail, during which movement the movable track portion extends substantially perpendicularly to the guide rail.

Claim 4: (*Currently amended*) An amusement device according to Claim 1,

characterized in that the movable track portion ~~can be~~ is moved by means of a cable that can be wound onto a drum.

Claim 5: (*Currently amended*) An amusement device according to Claim 1,

characterized in that the amusement device is provided with a safety device which comprises a number of pulleys and a safety cable passed over said pulleys, the two ends of which safety

cable are connected to the movable track portion, whilst the pulleys can be moved by means of a piston-cylinder combination.

Claim 6: (New) An amusement device for providing a sense of excitement to one or more persons using the amusement device, said amusement device comprising:

- (a) a detachable and movable track section adapted to support a track-following vehicle, the vehicle being sufficiently large to carry one or more of said persons using the amusement device, the movable track section being elongated to generally define a corresponding first axis of elongation;
- (b) a driving system adapted to move the movable track section between a relatively low first position and a higher second position;
- (c) a tilter operatively coupled to the movable track section to cause the first axis of elongation of the movable track section to be tilted into a substantially horizontal first angle when the movable track section is in said first position and to cause the first axis of elongation to be tilted into a substantially non-horizontal second angle when the movable track section is in said second position, the second angle being sufficiently non-horizontal so that if the vehicle and vehicle-carried riders are supported by the movable track section at the time its first axis attains said second angle, the second angle provides a sense of enhanced excitement to the one or more persons carried in the vehicle beyond excitement provided merely by the vehicle and movable track section being at said higher second position; and
- (d) at least one track-continuation section to which the movable track section detachably attaches so that said track-following vehicle can move between a first support state in which the vehicle is supported by the movable track section and a second support state in which the vehicle is supported by the at least one track-continuation section, the movement of the track-following vehicle between the first and second support state occurring when the movable track section is attached to the at least one track-continuation section.

Claim 7: (New) The amusement device of Claim 6 wherein:

- (c.1) said substantially non-horizontal second angle is in the order range of 30 to 90 degrees away from the horizontal.

- Claim 8: (New) The amusement device of Claim 7 wherein:
- (d.1) a first of said at least one track-continuation sections is located at the higher second position and is adapted to allow the vehicle to directly follow the first track-continuation section under force of gravity when the vehicle is released from the attached, movable track section while said substantially non-horizontal second angle is attained.
- Claim 9: (New) The amusement device of Claim 6 wherein:
- (c.1) the tilter tilts the first axis of elongation of the movable track section between the first and second angles at a same time while the driving system is moving the movable track section between the first and second positions.
- Claim 10: (New) The amusement device of Claim 6 wherein:
- (c.1) the tilter tilts the first axis of elongation of the movable track section to the second angle after the driving system has moved the movable track section to a position at or substantially near the second position.
- Claim 11: (New) The amusement device of Claim 6 wherein:
- (c.1) the tilter includes a guide rail that operatively couples to the movable track section while the movable track section is moving between the first and second positions, where the guide rail controls the angle of the first axis of elongation relative to the horizontal.
- Claim 12: (New) The amusement device of Claim 11 wherein:
- (c.1a) the guide rail includes a circular arc portion.
- Claim 13: (New) The amusement device of Claim 11 wherein:
- (c.1a) the guide rail includes a substantially vertical portion.
- Claim 14: (New) The amusement device of Claim 11 wherein:
- (c.2) the tilter includes a support structured to support the movable track section so that its first axis of elongation maintains a predefined third angle relative to a

corresponding tangent of the guide rail while the movable track section moves in operative intercoupling with guide rail.

Claim 15: (New) The amusement device of Claim 14 wherein:

(c.2a) the third angle is about 90 degrees.

Claim 16: (New) The amusement device of Claim 6 wherein:

(d.1) said driving system includes a first cable operatively coupled to pull the movable track section up from the lower first position to the higher second position; and

(d.2) said driving system includes a second cable operatively coupled to pull the movable track section down from the higher second position to the lower first position.

Claim 17: (New) The amusement device of Claim 16 wherein:

(d.1) said driving system includes a third cable operatively coupled to apply a counterweight force against the weight of at least one of said movable track section and said vehicle.

Claim 18: (New) The amusement device of Claim 17 wherein:

(d.1a) said third cable defines a safety loop with two opposed parts of the safety loop connected to the movable track section.

Claim 19: (New) The amusement device of Claim 17 wherein:

(d.1a) said third cable is coupled to a cylinder-piston combination which provides said counterweight force and inhibits the movable track section from falling rapidly in a case where the first cable fails to adequately support the movable track section.

Claim 20: (New) The amusement device of Claim 6 wherein:

(d.1) a first of said at least one track-continuation sections is located at the higher second position and is angled according to said substantially non-horizontal second angle so that the vehicle can continue its track-following motion at said second angle when moving between the movable track section and the first track-continuation section.

Claim 21: (New) The amusement device of Claim 20 wherein:

(d.2) a second of said at least one track-continuation sections is located at the lower first position and is angled according to said substantially horizontal first angle so that the vehicle can continue its track-following motion at said first angle when moving between the movable track section and the second track-continuation section.

Claim 22: (New) The amusement device of Claim 21 wherein:

(d.3) both of the first and second track-continuation sections extend in a generally same continuation direction so that a vehicle moving from one of the first and second track-continuation sections to the other by way of said movable track section undergoes a reversal of traveling direction, entering the movable track section while moving in a first traveling direction defined by said continuation direction and leaving the movable track section while moving in an opposite second traveling direction, and also experiencing a change of elevation in switching from one of the first and second track-continuation sections to the other.

Claim 23: (New) The amusement device of Claim 6 and further comprising:

(e) a first multi-section track-following vehicle adapted to carry a plurality of persons, where the movable track section is at least as long as the multi-section vehicle.

Claim 24: (New) The amusement device of Claim 23 and further comprising:

(f) a boarding station at which passengers can board said first multi-section track-following vehicle;

(d.1) wherein a first of said at least one track-continuation sections is located at the lower first position and is and is angled according to said substantially horizontal first angle so that the first vehicle can continue its track-following motion at said first angle when moving between the movable track section and the first track-continuation section; and

(f.1) the boarding station is located along the first track-continuation section and spaced sufficiently away from said movable track section so that a second multi-section track-following vehicle can stop in the boarding station for boarding of additional passengers while the first multi-section track-following vehicle is being

moved between the first and second positions while supported by the movable track section.

Claim 25: (New) The amusement device of Claim 6 wherein:

(a.1) said track section has an axis of tilt approximately midway along its first axis of elongation.

Claim 26: (New) A method for operating an amusement device so as to provide a sense of excitement to one or more persons using the amusement device, said method comprising:

- (a) supporting a first track-following vehicle on a movable track section, the vehicle being sufficiently large to carry one or more of said persons using the amusement device, the movable track section being elongated to generally define a corresponding first axis of elongation;
- (b) moving the movable track section between a relatively low first position and a higher second position while the first vehicle is supported by the movable track section; and
- (c) while the first vehicle is supported by the movable track section, tilting the movable track section so as to cause the first axis of elongation of the movable track section to be tilted at a substantially horizontal first angle when the movable track section is in said first position and to cause the first axis of elongation to be tilted at a substantially non-horizontal second angle when the movable track section is in said second position, the second angle being sufficiently non-horizontal so that if the supported vehicle carries one or more passengers at the time the first axis attains said second angle, the second angle provides a sense of enhanced excitement to the one or more passengers beyond excitement provided merely by the vehicle and movable track section being at said higher second position.

Claim 27: (New) The operating method of Claim 26 and further comprising:

- (d) detachably attaching the movable track section to at least one track-continuation section so that said track-following vehicle can move between a first support state in which the vehicle is supported by the movable track section and a second support state in which the vehicle is supported by the at least one track-continuation section, the movement of the track-following vehicle between the first

and second support state occurring when the movable track section is attached to the at least one track-continuation section.

Claim 28: (New) The operating method of Claim 27 wherein:

(c.1) said substantially non-horizontal second angle is in the order range of 30 to 90 degrees away from the horizontal.

Claim 29: (New) The amusement device of Claim 28 wherein:

(d.1) a first of said at least one track-continuation sections is located at the higher second position and is adapted to allow the vehicle to directly follow the first track-continuation section under force of gravity when the vehicle is released from the attached, movable track section while said substantially non-horizontal second angle is attained.

Claim 30: (New) The operating method of Claim 26 wherein:

(c.1) said substantially non-horizontal second angle is in the order range of 30 to 90 degrees away from the horizontal.

Claim 31: (New) The operating method of Claim 26 wherein said moving of the movable track section includes:

(b.1) using a first cable to pull the movable track section up from the lower first position to the higher second position.

Claim 32: (New) The operating method of Claim 31 wherein said moving of the movable track section includes:

(b.2) using a second cable to pull the movable track section down from the higher second position to the lower first position.

Claim 33: (New) The operating method of Claim 32 wherein said moving of the movable track section includes:

(b.1) using a third cable to apply a counterweight force against the weight of at least one of said movable track section and said vehicle.

Claim 34: (New) The operating method of Claim 26 wherein said moving of the movable track section includes:

(b.1) using a piston-cylinder combination to apply a dynamically damped, counterweight force against the weight of at least one of said movable track section and said vehicle.

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